



SEQUENCE LISTING

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<120> VZV ORF29p Protein-Related Compositions and Methods

<130> 0575/61152-A

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<170> PatentIn version 3.1

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10

15

tac gtt tat gcg tgc cgg gtt gaa gat ttg gat ctg gag gaa att tca

96

Tyr Val Tyr Ala Cys Arg Val Glu Asp Leu Asp Leu Glu Glu Ile Ser

20

25

30

ttt ttg gcc gct cgt agc acg gac tct gat ttg gct tta tta cct ttg

144

Phe Leu Ala Ala Arg Ser Thr Asp Ser Asp Leu Ala Leu Leu Pro Leu

35

40

45

atg cgt aat ttg acc gtg gaa aaa act ttt aca tcc agc ctg gcg gtg

192

Met Arg Asn Leu Thr Val Glu Lys Thr Phe Thr Ser Ser Leu Ala Val

50

55

60

gtt tct gga gca cgc act acg ggt ctt gcc gga gct ggt att acc tta

240

Val Ser Gly Ala Arg Thr Thr Gly Leu Ala Gly Ala Gly Ile Thr Leu

65

70

75

80

aaa ctc act acc agt cat ttc tat cca tct gtc ttt gtc ttt cac gga

288

Lys Leu Thr Thr Ser His Phe Tyr Pro Ser Val Phe Val Phe His Gly

85

90

95

ggc aaa cac gtt tta ccc agc tcc gcg gcc cca aat ctc aca cgc gcg

336

Gly Lys His Val Leu Pro Ser Ser Ala Ala Pro Asn Leu Thr Arg Ala

100

105

110

tgt aac gcg gct cga gaa cgg ttt ggg ttt tca cgc tgc caa ggg cct

384

Cys Asn Ala Ala Arg Glu Arg Phe Gly Phe Ser Arg Cys Gln Gly Pro

115

120

125

cct gtt gac ggt gct gtt gag acg acc ggc gct gag ata tgc acc cgc

432

Pro Val Asp Gly Ala Val Glu Thr Thr Gly Ala Glu Ile Cys Thr Arg

130	135	140
ctt gga tta gag cca gaa aat aca ata tta tac ttg gtg gtc acg gca 480 Leu Gly Leu Glu Pro Glu Asn Thr Ile Leu Tyr Leu Val Val Thr Ala		
145	150	155
ttg ttt aag gaa gcc gta ttt atg tgc aac gtg ttt ctg cat tat gga 528 Leu Phe Lys Glu Ala Val Phe Met Cys Asn Val Phe Leu His Tyr Gly		
	165	170
gga ctc gat att gtt cat att aac cat ggg gat gtt ata cgt ata ccg 576 Gly Leu Asp Ile Val His Ile Asn His Gly Asp Val Ile Arg Ile Pro		
	180	185
tta ttt ccg gta caa ctt ttc atg ccc gat gtt aac cgt ctg gta ccc 624 Leu Phe Pro Val Gln Leu Phe Met Pro Asp Val Asn Arg Leu Val Pro		
	195	200
gac cca ttc aac act cat cac agg tct atc gga gag ggt ttt gta tac 672 Asp Pro Phe Asn Thr His His Arg Ser Ile Gly Glu Gly Phe Val Tyr		
210	215	220
cca aca ccc ttt tat aac acc ggg ttg tgc cat tta ata cat gac tgt 720 Pro Thr Pro Phe Tyr Asn Thr Gly Leu Cys His Leu Ile His Asp Cys		

225 230 235 240

gtt att gct ccc atg gcc gtt gcc ttg cgc gtc aga aat gta act gcc
768

Val Ile Ala Pro Met Ala Val Ala Leu Arg Val Arg Asn Val Thr Ala

245 250 255

gtc gcc cga gga ggc gcc cac ctt gct ttt gat gaa aat cac gag ggg
816

Val Ala Arg Gly Ala Ala His Leu Ala Phe Asp Glu Asn His Glu Gly

260 265 270

gca gta ctc ccc cct gac att acg tac acg tat ttt cag tcc tct tca
864

Ala Val Leu Pro Pro Asp Ile Thr Tyr Thr Tyr Phe Gln Ser Ser Ser

275 280 285

agt gga acc act acc gcc cgt gga ggc cgt cga aac gat gtc aac tcc
912

Ser Gly Thr Thr Thr Ala Arg Gly Ala Arg Arg Asn Asp Val Asn Ser

290 295 300

acg tct aag cct agc cca tcg ggg ggg ttt gaa aga cgg ttg gcg tct
960

Thr Ser Lys Pro Ser Pro Ser Gly Gly Phe Glu Arg Arg Leu Ala Ser

305 310 315 320

att atg gcc gct gac aca gcc ttg cac gca gaa gtt ata ttc aac act
1008

Ile Met Ala Ala Asp Thr Ala Leu His Ala Glu Val Ile Phe Asn Thr

325 330 335

gga att tac gaa gaa act cca aca gat atc aaa gaa tgg cca atg ttt
1056

Gly Ile Tyr Glu Glu Thr Pro Thr Asp Ile Lys Glu Trp Pro Met Phe

340

345

350

ata ggc atg gag ggc act ttg cca agg cta aac gct ctg ggg tca tat
1104

Ile Gly Met Glu Gly Thr Leu Pro Arg Leu Asn Ala Leu Gly Ser Tyr

355

360

365

acc gct cgt gtg gcc ggg gtc att ggt gcg atg gtt ttc agc cca aat
1152

Thr Ala Arg Val Ala Gly Val Ile Gly Ala Met Val Phe Ser Pro Asn

370

375

380

tct gcg ttg tat cta act gag gtg gag gat agc ggg atg acc gaa gcc
1200

Ser Ala Leu Tyr Leu Thr Glu Val Glu Asp Ser Gly Met Thr Glu Ala

385

390

395

400

aag gat ggg gga ccg ggt cca tca ttt aat cga ttt tac cag ttt gcc
1248

Lys Asp Gly Gly Pro Gly Pro Ser Phe Asn Arg Phe Tyr Gln Phe Ala

405

410

415

gga cct cat tta gct gcg aat ccc caa aca gat cga gat ggc cac gtt
1296

Gly Pro His Leu Ala Ala Asn Pro Gln Thr Asp Arg Asp Gly His Val

420

425

430

cta tcc agt cag tct acg ggt tca tca aac aca gag ttt agc gtg gat
1344

Leu Ser Ser Gln Ser Thr Gly Ser Ser Asn Thr Glu Phe Ser Val Asp

435

440

445

tat ttg gca ctc att tgt gga ttt gga gca ccc ctg ttg gcg cga ctg
1392

Tyr Leu Ala Leu Ile Cys Gly Phe Gly Ala Pro Leu Leu Ala Arg Leu

450

455

460

ctt ttt tat cta gaa cgc tgt gac gct ggt gcg ttt aca ggg ggt cac
1440

Leu Phe Tyr Leu Glu Arg Cys Asp Ala Gly Ala Phe Thr Gly Gly His

465

470

475

480

ggg gat gcg tta aaa tat gtt acg ggg acc ttt gac tct gaa att cca
1488

Gly Asp Ala Leu Lys Tyr Val Thr Gly Thr Phe Asp Ser Glu Ile Pro

485

490

495

tgt agt tta tgt gaa aaa cac acg cgg ccg gta tgc gct cac aca aca
1536

Cys Ser Leu Cys Glu Lys His Thr Arg Pro Val Cys Ala His Thr Thr

500

505

510

gta cac cga ctt aga caa cgc atg ccg cga ttt gga caa gcc acc cgt
1584

Val His Arg Leu Arg Gln Arg Met Pro Arg Phe Gly Gln Ala Thr Arg

515

520

525

caa cct att ggg gtg ttt gga aca atg aac agc caa tat agc gac tgc
1632

Gln Pro Ile Gly Val Phe Gly Thr Met Asn Ser Gln Tyr Ser Asp Cys

530

535

540

gat cct cta gga aac tat gct cca tat tta atc ctt cga aaa ccc ggg
1680

Asp Pro Leu Gly Asn Tyr Ala Pro Tyr Leu Ile Leu Arg Lys Pro Gly

545

550

555

560

gat caa acg gaa gca gca aag gca acc atg cag gac act tat agg gct
1728

Asp Gln Thr Glu Ala Ala Lys Ala Thr Met Gln Asp Thr Tyr Arg Ala

565

570

575

aca cta gaa cgc ttg ttt atc gat cta gaa caa gag cga cta ctg gat
1776

Thr Leu Glu Arg Leu Phe Ile Asp Leu Glu Gln Glu Arg Leu Leu Asp

580

585

590

cgc ggt gcc cca tgt tct tcc gag gga cta tcg tct gtc att gtg gat
1824

Arg Gly Ala Pro Cys Ser Ser Glu Gly Leu Ser Ser Val Ile Val Asp

595

600

605

cat cca acg ttt cgt cgc ata tta gac aca ctg cgt gcg cgt ata gaa
1872

His Pro Thr Phe Arg Arg Ile Leu Asp Thr Leu Arg Ala Arg Ile Glu

610

615

620

cag aca aca aca caa ttt atg aaa gtg ttg gtt gag acc cgc gat tat

1920
Gln Thr Thr Thr Gln Phe Met Lys Val Leu Val Glu Thr Arg Asp Tyr

625 630 635 640

aag atc cgt gaa gga tta tcc gaa gcc acc cat tca atg gcg tta acg

1968
Lys Ile Arg Glu Gly Leu Ser Glu Ala Thr His Ser Met Ala Leu Thr

645 650 655

ttt gat cca tac tca gga gca ttt tgt ccc att acc aat ttt tta gtt

2016
Phe Asp Pro Tyr Ser Gly Ala Phe Cys Pro Ile Thr Asn Phe Leu Val

660 665 670

aaa cga aca cac cta gcc gtg gta caa gac tta gca tta agc caa tgt

2064
Lys Arg Thr His Leu Ala Val Val Gln Asp Leu Ala Leu Ser Gln Cys

675 680 685

cat tgt gta ttt tac gga cag caa gtt gag ggg cgg aac ttt cgt aac

2112
His Cys Val Phe Tyr Gly Gln Gln Val Glu Gly Arg Asn Phe Arg Asn

690 695 700

caa ttc caa cct gtt ttg cgg cgg cgt ttt gtt gac ctg ttt aat ggg

2160
Gln Phe Gln Pro Val Leu Arg Arg Arg Phe Val Asp Leu Phe Asn Gly

705 710 715 720

ggg ttt ata tca aca cgc tct ata acc gta aca tta tct gaa ggt cct
2208

Gly Phe Ile Ser Thr Arg Ser Ile Thr Val Thr Leu Ser Glu Gly Pro

725

730

735

gta tcc gcc cca aat ccg aca ttg gga caa gac gcg ccc gcg ggg cgt
2256

Val Ser Ala Pro Asn Pro Thr Leu Gly Gln Asp Ala Pro Ala Gly Arg

740

745

750

acc ttt gat ggg gat tta gcg cgc gta agc gtg gaa gtt att cgg gat
2304

Thr Phe Asp Gly Asp Leu Ala Arg Val Ser Val Glu Val Ile Arg Asp

755

760

765

ata cga gtt aaa aat agg gtc gtt ttt tca ggt aac tgt aca aat ctc
2352

Ile Arg Val Lys Asn Arg Val Val Phe Ser Gly Asn Cys Thr Asn Leu

770

775

780

tct gag gca gcc cgg gca agg ctt gta ggc ctt gca agt gcg tac caa
2400

Ser Glu Ala Ala Arg Ala Arg Leu Val Gly Leu Ala Ser Ala Tyr Gln

785

790

795

800

cgc caa gaa aaa aga gtg gat atg tta cac ggg gcc cta ggg ttt ttg
2448

Arg Gln Glu Lys Arg Val Asp Met Leu His Gly Ala Leu Gly Phe Leu

805

810

815

ctt aaa cag ttt cac ggc ctg tta ttt cct cgg ggt atg cca cca aac
2496

Leu Lys Gln Phe His Gly Leu Leu Phe Pro Arg Gly Met Pro Pro Asn

820

825

830

agt aaa tcc ccc aac ccg cag tgg ttt tgg acc ctg tta caa cgc aac
2544

Ser Lys Ser Pro Asn Pro Gln Trp Phe Trp Thr Leu Leu Gln Arg Asn

835

840

845

cag atg ccg gca gat aaa ctt aca cac gaa gag att acc act att gca
2592

Gln Met Pro Ala Asp Lys Leu Thr His Glu Glu Ile Thr Thr Ile Ala

850

855

860

gct gtt aaa cgg ttt acc gag gaa tat gca gca ata aac ttt att aat
2640

Ala Val Lys Arg Phe Thr Glu Glu Tyr Ala Ala Ile Asn Phe Ile Asn

865

870

875

880

cta ccc cca acc tgc ata gga gaa tta gcc cag ttt tat atg gca aat
2688

Leu Pro Pro Thr Cys Ile Gly Glu Leu Ala Gln Phe Tyr Met Ala Asn

885

890

895

ctt att ctt aaa tac tgc gat cat tca cag tac ctt ata aat acc tta
2736

Leu Ile Leu Lys Tyr Cys Asp His Ser Gln Tyr Leu Ile Asn Thr Leu

900

905

910

act tct ata att acg ggt gcc agg cgc ccg cgt gac cca tca tcc gtt
2784

Thr Ser Ile Ile Thr Gly Ala Arg Arg Pro Arg Asp Pro Ser Ser Val

915	920	925	
ttg cat tgg att cgt aaa gat gtc acg tcc gcc gcg gac ata gaa acc 2832 Leu His Trp Ile Arg Lys Asp Val Thr Ser Ala Ala Asp Ile Glu Thr			
930	935	940	
caa gca aag gcg ctt ctt gaa aaa acg gaa aac tta ccg gaa tta tgg 2880 Gln Ala Lys Ala Leu Leu Glu Lys Thr Glu Asn Leu Pro Glu Leu Trp			
945	950	955	960
act acg gct ttt act tca act cat tta gtc cgc gcg gcc atg aat caa 2928 Thr Thr Ala Phe Thr Ser Thr His Leu Val Arg Ala Ala Met Asn Gln			
965	970	975	
cgt ccc atg gtc gtt tta gga ata agc att agt aaa tat cac gga gcg 2976 Arg Pro Met Val Val Leu Gly Ile Ser Ile Ser Lys Tyr His Gly Ala			
980	985	990	
gca gga aac aac cgc gtc ttt cag gca ggg aat tgg agc ggt tta aac 3024 Ala Gly Asn Asn Arg Val Phe Gln Ala Gly Asn Trp Ser Gly Leu Asn			
995	1000	1005	
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1010	1015	1020	

cgt ttt ata ata gca tgt cct aga gga ggt ttt atc tgc ccc gta
3114

Arg Phe Ile Ile Ala Cys Pro Arg Gly Gly Phe Ile Cys Pro Val

1025

1030

1035

aca ggt ccc tcg tcg gga aat cga gaa acc acc cta tcc gac caa
3159

Thr Gly Pro Ser Ser Gly Asn Arg Glu Thr Thr Leu Ser Asp Gln

1040

1045

1050

gtt cgc ggt ata att gtc agt ggc ggg gcc atg gtt caa tta gcc
3204

Val Arg Gly Ile Ile Val Ser Gly Gly Ala Met Val Gln Leu Ala

1055

1060

1065

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3249

Ile Tyr Ala Thr Val Val Arg Ala Val Gly Ala Arg Ala Gln His

1070

1075

1080

atg gca ttt gac gac tgg tta agt ctt aca gac gat gag ttt tta
3294

Met Ala Phe Asp Asp Trp Leu Ser Leu Thr Asp Asp Glu Phe Leu

1085

1090

1095

gcc aga gac ttg gag gag tta cac gac cag att atc caa acc ctg
3339

Ala Arg Asp Leu Glu Glu Leu His Asp Gln Ile Ile Gln Thr Leu

1100

1105

1110

gaa acg ccc tgg acc gta gaa ggc gct cta gaa gca gta aag att
3384

Glu Thr Pro Trp Thr Val Glu Gly Ala Leu Glu Ala Val Lys Ile

1115

1120

1125

cta gat gaa aaa acg aca ggc gga gat ggg gaa acc ccc aca aac
3429

Leu Asp Glu Lys Thr Thr Ala Gly Asp Gly Glu Thr Pro Thr Asn

1130

1135

1140

cta gca ttt aat ttt gat tct tgt gaa cca agc cat gac acc aca
3474

Leu Ala Phe Asn Phe Asp Ser Cys Glu Pro Ser His Asp Thr Thr

1145

1150

1155

tct aac gta tta aac att tca ggg tca aac att tca ggg tca act
3519

Ser Asn Val Leu Asn Ile Ser Gly Ser Asn Ile Ser Gly Ser Thr

1160

1165

1170

gtc cct ggt ctt aaa cga ccc ccc gaa gat gac gaa ctc ttt gat
3564

Val Pro Gly Leu Lys Arg Pro Pro Glu Asp Asp Glu Leu Phe Asp

1175

1180

1185

ctt agt ggt att ccc ata aaa cat ggg aac att aca atg gaa atg a
3610

Leu Ser Gly Ile Pro Ile Lys His Gly Asn Ile Thr Met Glu Met

1190

1195

1200

<210> 2
 <211> 1203
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 <213> Varicella zoster

<400> 2

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 20 25 30

Phe Leu Ala Ala Arg Ser Thr Asp Ser Asp Leu Ala Leu Leu Pro Leu
 35 40 45

Met Arg Asn Leu Thr Val Glu Lys Thr Phe Thr Ser Ser Leu Ala Val
 50 55 60

Val Ser Gly Ala Arg Thr Thr Gly Leu Ala Gly Ala Gly Ile Thr Leu
 65 70 75 80

Lys Leu Thr Thr Ser His Phe Tyr Pro Ser Val Phe Val Phe His Gly
 85 90 95

Gly Lys His Val Leu Pro Ser Ser Ala Ala Pro Asn Leu Thr Arg Ala
 100 105 110

Cys Asn Ala Ala Arg Glu Arg Phe Gly Phe Ser Arg Cys Gln Gly Pro
 115 120 125

Pro Val Asp Gly Ala Val Glu Thr Thr Gly Ala Glu Ile Cys Thr Arg
 130 135 140

Leu Gly Leu Glu Pro Glu Asn Thr Ile Leu Tyr Leu Val Val Thr Ala
 145 150 155 160

Leu Phe Lys Glu Ala Val Phe Met Cys Asn Val Phe Leu His Tyr Gly
 165 170 175

Gly Leu Asp Ile Val His Ile Asn His Gly Asp Val Ile Arg Ile Pro
 180 185 190

Leu Phe Pro Val Gln Leu Phe Met Pro Asp Val Asn Arg Leu Val Pro
 195 200 205

Asp Pro Phe Asn Thr His His Arg Ser Ile Gly Glu Gly Phe Val Tyr
 210 215 220

Pro Thr Pro Phe Tyr Asn Thr Gly Leu Cys His Leu Ile His Asp Cys
 225 230 235 240

Val Ile Ala Pro Met Ala Val Ala Leu Arg Val Arg Asn Val Thr Ala
 245 250 255

Val Ala Arg Gly Ala Ala His Leu Ala Phe Asp Glu Asn His Glu Gly
 260 265 270

Ala Val Leu Pro Pro Asp Ile Thr Tyr Thr Tyr Phe Gln Ser Ser Ser
 275 280 285

Ser Gly Thr Thr Thr Ala Arg Gly Ala Arg Arg Asn Asp Val Asn Ser
 290 295 300

Thr Ser Lys Pro Ser Pro Ser Gly Gly Phe Glu Arg Arg Leu Ala Ser
 305 310 315 320

Ile Met Ala Ala Asp Thr Ala Leu His Ala Glu Val Ile Phe Asn Thr
 325 330 335

Gly Ile Tyr Glu Glu Thr Pro Thr Asp Ile Lys Glu Trp Pro Met Phe
 340 345 350

Ile Gly Met Glu Gly Thr Leu Pro Arg Leu Asn Ala Leu Gly Ser Tyr
 355 360 365

Thr Ala Arg Val Ala Gly Val Ile Gly Ala Met Val Phe Ser Pro Asn
 370 375 380

Ser Ala Leu Tyr Leu Thr Glu Val Glu Asp Ser Gly Met Thr Glu Ala
 385 390 395 400

Lys Asp Gly Gly Pro Gly Pro Ser Phe Asn Arg Phe Tyr Gln Phe Ala
 405 410 415

Gly Pro His Leu Ala Ala Asn Pro Gln Thr Asp Arg Asp Gly His Val
 420 425 430

Leu Ser Ser Gln Ser Thr Gly Ser Ser Asn Thr Glu Phe Ser Val Asp
 435 440 445

Tyr Leu Ala Leu Ile Cys Gly Phe Gly Ala Pro Leu Leu Ala Arg Leu
 450 455 460

Leu Phe Tyr Leu Glu Arg Cys Asp Ala Gly Ala Phe Thr Gly Gly His
 465 470 475 480

Gly Asp Ala Leu Lys Tyr Val Thr Gly Thr Phe Asp Ser Glu Ile Pro

485

490

495

Cys Ser Leu Cys Glu Lys His Thr Arg Pro Val Cys Ala His Thr Thr
 500 505 510

Val His Arg Leu Arg Gln Arg Met Pro Arg Phe Gly Gln Ala Thr Arg
 515 520 525

Gln Pro Ile Gly Val Phe Gly Thr Met Asn Ser Gln Tyr Ser Asp Cys
 530 535 540

Asp Pro Leu Gly Asn Tyr Ala Pro Tyr Leu Ile Leu Arg Lys Pro Gly
 545 550 555 560

Asp Gln Thr Glu Ala Ala Lys Ala Thr Met Gln Asp Thr Tyr Arg Ala
 565 570 575

Thr Leu Glu Arg Leu Phe Ile Asp Leu Glu Gln Glu Arg Leu Leu Asp
 580 585 590

Arg Gly Ala Pro Cys Ser Ser Glu Gly Leu Ser Ser Val Ile Val Asp
 595 600 605

His Pro Thr Phe Arg Arg Ile Leu Asp Thr Leu Arg Ala Arg Ile Glu
 610 615 620

Gln Thr Thr Thr Gln Phe Met Lys Val Leu Val Glu Thr Arg Asp Tyr
 625 630 635 640

Lys Ile Arg Glu Gly Leu Ser Glu Ala Thr His Ser Met Ala Leu Thr
 645 650 655

Phe Asp Pro Tyr Ser Gly Ala Phe Cys Pro Ile Thr Asn Phe Leu Val
 660 665 670

Lys Arg Thr His Leu Ala Val Val Gln Asp Leu Ala Leu Ser Gln Cys
 675 680 685

His Cys Val Phe Tyr Gly Gln Gln Val Glu Gly Arg Asn Phe Arg Asn
 690 695 700

Gln Phe Gln Pro Val Leu Arg Arg Arg Phe Val Asp Leu Phe Asn Gly
 705 710 715 720

Gly Phe Ile Ser Thr Arg Ser Ile Thr Val Thr Leu Ser Glu Gly Pro
 725 730 735

Val Ser Ala Pro Asn Pro Thr Leu Gly Gln Asp Ala Pro Ala Gly Arg
 740 745 750

Thr Phe Asp Gly Asp Leu Ala Arg Val Ser Val Glu Val Ile Arg Asp
 755 760 765

Ile Arg Val Lys Asn Arg Val Val Phe Ser Gly Asn Cys Thr Asn Leu
 770 775 780

Ser Glu Ala Ala Arg Ala Arg Leu Val Gly Leu Ala Ser Ala Tyr Gln
 785 790 795 800

Arg Gln Glu Lys Arg Val Asp Met Leu His Gly Ala Leu Gly Phe Leu
 805 810 815

Leu Lys Gln Phe His Gly Leu Leu Phe Pro Arg Gly Met Pro Pro Asn
 820 825 830

Ser Lys Ser Pro Asn Pro Gln Trp Phe Trp Thr Leu Leu Gln Arg Asn
 835 840 845

Gln Met Pro Ala Asp Lys Leu Thr His Glu Glu Ile Thr Thr Ile Ala
 850 855 860

Ala Val Lys Arg Phe Thr Glu Glu Tyr Ala Ala Ile Asn Phe Ile Asn
 865 870 875 880

Leu Pro Pro Thr Cys Ile Gly Glu Leu Ala Gln Phe Tyr Met Ala Asn
 885 890 895

Leu Ile Leu Lys Tyr Cys Asp His Ser Gln Tyr Leu Ile Asn Thr Leu
 900 905 910

Thr Ser Ile Ile Thr Gly Ala Arg Arg Pro Arg Asp Pro Ser Ser Val
 915 920 925

Leu His Trp Ile Arg Lys Asp Val Thr Ser Ala Ala Asp Ile Glu Thr
 930 935 940

Gln Ala Lys Ala Leu Leu Glu Lys Thr Glu Asn Leu Pro Glu Leu Trp
 945 950 955 960

Thr Thr Ala Phe Thr Ser Thr His Leu Val Arg Ala Ala Met Asn Gln
 965 970 975

Arg Pro Met Val Val Leu Gly Ile Ser Ile Ser Lys Tyr His Gly Ala
 980 985 990

Ala Gly Asn Asn Arg Val Phe Gln Ala Gly Asn Trp Ser Gly Leu Asn
 995 1000 1005

Gly Gly	Lys Asn Val Cys Pro	Leu Phe Thr Phe Asp	Arg Thr Arg
1010	1015	1020	
Arg Phe	Ile Ile Ala Cys Pro	Arg Gly Gly Phe Ile	Cys Pro Val
1025	1030	1035	
Thr Gly	Pro Ser Ser Gly Asn	Arg Glu Thr Thr Leu	Ser Asp Gln
1040	1045	1050	
Val Arg	Gly Ile Ile Val Ser	Gly Gly Ala Met Val	Gln Leu Ala
1055	1060	1065	
Ile Tyr	Ala Thr Val Val Arg	Ala Val Gly Ala Arg	Ala Gln His
1070	1075	1080	
Met Ala	Phe Asp Asp Trp Leu	Ser Leu Thr Asp Asp	Glu Phe Leu
1085	1090	1095	
Ala Arg	Asp Leu Glu Glu Leu	His Asp Gln Ile Ile	Gln Thr Leu
1100	1105	1110	
Glu Thr	Pro Trp Thr Val Glu	Gly Ala Leu Glu Ala	Val Lys Ile
1115	1120	1125	
Leu Asp	Glu Lys Thr Thr Ala	Gly Asp Gly Glu Thr	Pro Thr Asn
1130	1135	1140	
Leu Ala	Phe Asn Phe Asp Ser	Cys Glu Pro Ser His	Asp Thr Thr
1145	1150	1155	
Ser Asn	Val Leu Asn Ile Ser	Gly Ser Asn Ile Ser	Gly Ser Thr

1160

1165

1170

Val	Pro	Gly	Leu	Lys	Arg	Pro	Pro	Glu	Asp	Asp	Glu	Leu	Phe	Asp
1175						1160					1185			

Leu	Ser	Gly	Ile	Pro	Ile	Lys	His	Gly	Asn	Ile	Thr	Met	Glu	Met
1190						1195					1200			